

## LISTING OF THE CLAIMS

Please amend the claims as shown below. Please cancel Claims 8, 16 and 24 without prejudice. This listing of claims will replace all prior versions and listings of claims in the Application.

1. (Currently Amended) A computer implemented method for determining a preference policy for a market, said method comprising ~~the steps of~~:  
selecting characteristics of said market, wherein said market comprises an auction market;  
selecting a relevant bidding model;  
estimating a structure of said market;  
predicting a bidding behavior;  
predicting a first outcome of said market; and  
evaluating said first outcome of said market, wherein said evaluating comprises:  
selecting a best preference policy from a plurality of candidate preference policies, wherein said best preference policy comprises the candidate preference policy within a plurality having the highest ranking; and  
outputting said best preference policy.

2. (Currently Amended) The computer implemented method as recited in Claim 1, wherein said selecting characteristics ~~step~~ further comprises ~~the steps of~~:  
receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned;  
accessing a database;  
retrieving from said database historical bids data;

retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items;  
outputting said bids data; and  
outputting said auction characteristics data.

3. (Currently Amended) The computer implemented method as recited in Claim 1, wherein said selecting a relevant bidding model ~~step~~ further comprises ~~the steps of~~:

receiving said auction characteristics data;  
accessing a database;  
retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and  
outputting said relevant bidding model.

4. (Currently Amended) The computer implemented method as recited in Claim 1, wherein said estimating ~~step~~ further comprises ~~the steps of~~:

receiving said relevant bidding model;  
receiving said bids data;  
expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model;  
transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;  
estimating an estimated latent structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure; and

outputting said estimated structure.

5. (Currently Amended) The computer implemented method as recited in Claim 1, wherein said bidding model has embedded an unknown structure, and wherein said predicting a bidding behavior ~~step~~ further comprises ~~the steps of~~:

- receiving said estimated structure;
- receiving said relevant bidding model;
- substituting said estimated structure for said unknown structure; and
- outputting a prediction of bidding behavior.

6. (Currently Amended) The computer implemented method as recited in Claim 1, wherein said predicting a first outcome ~~step~~ further comprises ~~the steps of~~:

- receiving a second user input, wherein said second user input comprises:
  - an evaluation criterion;
  - a candidate preference policy; and
  - a constraint;
- receiving said estimated structure;
- receiving said bidding behavior prediction for said candidate preference policy, wherein said bidding behavior prediction further comprises a prediction under said constraint;
- obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate preference policy, and said constraint, said value comprising said first predicted outcome; and
- outputting said value.

7. (Currently Amended) The computer implemented method as recited in Claim 1, wherein said evaluating said first outcome ~~step~~ further comprises ~~the steps of~~:

receiving a third user input, wherein said third user input comprises a plurality of candidate preference policies;

receiving a predicted outcome for each said candidate preference policy;

calculating descriptive statistics for each said candidate preference policy, wherein said descriptive statistics comprise a mean and a variance;

ranking each said candidate preference policy with respect to said calculated mean and generating corresponding rankings for said plurality; and

outputting said descriptive statistics and said rankings.

8. (Cancelled)

9. (Currently Amended) A computer system comprising:

a bus;

a memory interconnected with said bus; and

a processor interconnected with said bus, wherein said processor executes a method for determining a preference policy for a market, said method comprising ~~the steps of~~:

selecting characteristics of said market, wherein said market comprises an auction market;

selecting a relevant bidding model;

estimating a structure of said market;

predicting a bidding behavior;

predicting a first outcome of said market; and

evaluating said first outcome of said market, wherein said evaluating comprises:

selecting a best preference policy from a plurality of candidate preference policies, wherein said best preference policy comprises the candidate preference policy within a plurality having the highest ranking; and

outputting said best preference policy.

10. (Currently Amended) The system as recited in Claim 9, wherein said selecting characteristics ~~step~~ of said method further comprises ~~the steps of~~:

receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned;

accessing a database;

retrieving from said database historical bids data;

retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items;

outputting said bids data; and

outputting said auction characteristics data.

11. (Currently Amended) The system as recited in Claim 9, wherein said selecting a relevant bidding model ~~step~~ of said method further comprises ~~the steps of~~:

receiving said auction characteristics data;

accessing a database;

retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said relevant bidding model.

12. (Currently Amended) The system as recited in Claim 9, wherein said estimating ~~step~~ of said method further comprises ~~the steps of~~:

receiving said relevant bidding model;

receiving said bids data;

expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model;

transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;

estimating an estimated latent structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure; and

outputting said estimated structure.

13. (Currently Amended) The system as recited in Claim 9, wherein said bidding model has embedded an unknown structure, and wherein said predicting a bidding behavior step of said method further comprises the steps of:

receiving said estimated structure;

receiving said relevant bidding model;

substituting said estimated structure for said unknown structure; and

outputting a prediction of bidding behavior.

14. (Currently Amended) The system as recited in Claim 9, wherein said predicting a first outcome ~~step~~ of said method further comprises ~~the steps of~~:

receiving a second user input, wherein said second user input comprises:

- an evaluation criterion;-

a candidate preference policy; and  
a constraint;  
receiving said estimated structure;  
receiving said bidding behavior prediction for said candidate preference policy, wherein said bidding behavior prediction further comprises a prediction under said constraint;  
obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate preference policy, and said constraint, said value comprising said first predicted outcome; and  
outputting said value.

15. (Currently Amended) The system as recited in Claim 9, wherein said evaluating said first outcome step of said method further comprises the steps of:  
receiving a third user input, wherein said third user input comprises a plurality of candidate preference policies;  
receiving a predicted outcome for each said candidate preference policy;  
calculating descriptive statistics for each said candidate preference policy, wherein said descriptive statistics comprise a mean and a variance;  
ranking each said candidate preference policy with respect to said calculated mean and generating corresponding rankings for said plurality; and  
outputting said descriptive statistics and said rankings.

16. (Cancelled)

17. (Currently Amended) A computer readable medium having encoded therein a computer readable code for causing a computer system to execute the

~~steps in a~~ computer implemented method for determining a preference policy for a market, said method comprising ~~the steps of:~~

selecting characteristics of said market, wherein said market comprises an auction market;

selecting a relevant bidding model;

estimating a structure of said market;

predicting a bidding behavior;

predicting a first outcome of said market; and

evaluating said first outcome of said market, wherein said evaluating comprises:

selecting a best preference policy from a plurality of candidate preference policies, wherein said best preference policy comprises the candidate preference policy within a plurality having the highest ranking; and

outputting said best preference policy.

18. (Currently Amended) The computer readable medium as recited in Claim 17, wherein said selecting characteristics ~~step~~ of said method further comprises ~~the steps of:~~

receiving a first user input, wherein said first user input comprises information identifying an item to be auctioned;

accessing a database;

retrieving from said database historical bids data;

retrieving from said database auction characteristics data, wherein said auction characteristics comprise information relating to historical auctions of similar items;

outputting said bids data; and

outputting said auction characteristics data.



19. (Currently Amended) The computer readable medium as recited in Claim 17, wherein said selecting a relevant bidding model ~~step~~ of said method further comprises ~~the steps of~~:

receiving said auction characteristics data;

accessing a database;

retrieving from said database a relevant bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and

outputting said relevant bidding model.

20. (Currently Amended) The computer readable medium as recited in Claim 17, wherein said estimating ~~step~~ of said method further comprises ~~the steps of~~:

receiving said relevant bidding model;

receiving said bids data;

expressing unobservable variables in terms of observable bids, wherein said unobservable variables are expressed in terms of observable bids by inverting said bid model;

transforming said bids data to a sample of inverted bids, wherein said bids data are transformed by inverting said bid model;

estimating an estimated latent structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said estimated structure; and

outputting said estimated structure.

21. (Currently Amended) The computer readable medium as recited in Claim 17, wherein said bidding model has embedded an unknown structure, and wherein said predicting a bidding behavior ~~step~~ of said method further comprises ~~the steps of~~:

- receiving said estimated structure;
- receiving said relevant bidding model;
- substituting said estimated structure for said unknown structure; and
- outputting a prediction of bidding behavior.

22. (Currently Amended) The computer readable medium as recited in Claim 17, wherein said predicting a first outcome ~~step~~ of said method further comprises ~~the steps of~~:

- receiving a second user input, wherein said second user input comprises:
  - an evaluation criterion;
  - a candidate preference policy; and
  - a constraint;
- receiving said estimated structure;
- receiving said bidding behavior prediction for said candidate preference policy, wherein said bidding behavior prediction further comprises a prediction under said constraint;
- obtaining a value of said evaluation criterion, wherein said value is based on said estimated structure, said bidding behavior prediction, said candidate preference policy, and said constraint, said value comprising said first predicted outcome; and
- outputting said value.

23. (Currently Amended) The computer readable medium as recited in Claim 17, wherein said evaluating said first outcome ~~step~~ of said method further comprises ~~the steps of~~:

receiving a third user input, wherein said third user input comprises a plurality of candidate preference policies;

receiving a predicted outcome for each said candidate preference policy;

calculating descriptive statistics for each said candidate preference policy, wherein said descriptive statistics comprise a mean and a variance;

ranking each said candidate preference policy with respect to said calculated mean and generating corresponding rankings for said plurality; and

outputting said descriptive statistics and said rankings.

24. (Cancelled)